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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/533,025	03/22/2000	Yao Wang	E0295/7108	8409
7590	06/25/2004		EXAMINER	
Robert A Skrivanek Jr Wolf Greenfield & Sacks PC 600 Atlantic Avenue Boston, MA 02210			BONURA, TIMOTHY M	
ART UNIT	PAPER NUMBER	2114		
DATE MAILED: 06/25/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/533,025	WANG ET AL. <i>sf</i>	
Examiner	Art Unit		
Tim Bonura	2114		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 22 April 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-51 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 28 is/are allowed.
 6) Claim(s) 1-5,7,10-12,18-20,23,25-27,29-37,41,42,44-46,48 and 50 is/are rejected.
 7) Claim(s) 6,8,9,13-17,21,22,24,38-40,43,47,49 and 51 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 22 March 2000 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

- Tavallaei, U.S. Patent Number 5,834,856 and Bell, et al, U.S. Patent Number 5,917,997 reject claims 1-3, 11, 25-27, 29, 30, 44-46, 48, and 50.
- Claims 4, 5, 7, 10, 12, 18-20, 23, 31-37, 41, 42 are rejected by Tavallaei and Bell in further view of Vert, U.S. Patent Number 6,360,331
- The follow claims are objected to: 6, 8, 9, 13-17, 21, 22, 24, 38-40, 43, 47, 49, and 51

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1-3, 11, 25-27, 29, 30, 44-46, 48, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tavallaei, et al, U.S. Patent Number 5,834,856 and further in view of Bell, et al, U.S. Patent Number 5,917,997. Regarding claim 1:
 - a. Regarding the limitation of hosting an electronic commerce site, Tavallaei discloses computer environments for “banking transactions, document production, manufacturing... and information systems” which are equivalent to an electronic commerce system. (Lines 23-32 of Column 4).
 - b. Regarding the limitation as to method a detecting a change in operation of a computer system, Tavallaei discloses a system that is can detect a failure in a computer system and fail over to a redundant system. (Lines 35-41 of Column 4).

- c. Regarding the limitation of automatically configuring a second host computer to host at least a portion of a site, Tavallaei teaches of test a second host to make sure it can be used in case of a failure of a primary host. (Lines 65-67 of Column 4 and Lines 1-3 of Column 5). However, Tavallaei does not teach of a system that can configure a second host upon the failure of a primary. Bell teaches of a system that will configure a secondary server upon the failure of a primary host. (Lines 60-67 of Column 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Bell with the system of Tavallaei because; Tavallaei does not disclose means to have data protection in a business data system. However Tavallaei describes that "the results (of a computer system failure) can be temporarily catastrophic for the business." (Lines 30-32 of Column 4). Bell also discloses similar concerns. (Lines 25-29 of Column 1). By incorporating the data reliability and reconfiguration means of Bell and the hosting and detecting means of Tavallaei, a more reliable business host system can be achieved.
3. Regarding claim 2, detecting at least one failure or malfunction of the electronic commerce site, Tavallaei discloses a system which can detect an operational failure and fall over to a back up sever. (Lines 50-62 of Column 3).
4. Regarding claim 3, Tavallaei discloses an act of automatically shutting down the first host computer in response to the act of detecting a failure or malfunction. (Lines 1-4 of Column 5).
5. Regarding claim 11, Tavallaei discloses an act of detecting a decrease in performance of the electronic commerce site. (Lines 50-61 of Column 3).

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6. Regarding claim 25, and dealing with the limitation of hosting an electronic commerce site, Tavallaei discloses computer environments for "banking transactions, document production, manufacturing... and information systems" which are equivalent to an electronic commerce system. (Lines 23-32 of Column 4). Concerning the limitation as to method a detecting a change in operation of a computer system, Tavallaei discloses a system that is can detect a failure in a computer system and fail over to a redundant system. (Lines 35-41 of Column 4). Concerning the limitation of automatically configuring a second host computer to host at least some portion of the information that was held by the primary sever, Tavallaei discloses a system which shall be given time to become operational if a primary sever fails, which includes a period of time for the backup to become operational. (Lines 35-50 and 65-68 of Column 4 and Lines 1-3 of Column 5). Tavallaei discloses that any number of computer systems can be used to redundant devices or subsystems. (Lines 50-52 of Column 3).
7. Regarding claim 26, and dealing with the limitation of hosting an electronic commerce site, Tavallaei discloses computer environments for "banking transactions, document production, manufacturing... and information systems" which are equivalent to an electronic commerce system. (Lines 23-32 of Column 4). Concerning the limitation as to method a detecting a change in operation of a computer system, Tavallaei discloses a system that is can detect a failure in a computer system and fail over to a redundant system. (Lines 35-41 of Column 4). Concerning the limitation of automatically configuring a second host computer to host at least some portion of the information that was held by the primary sever, Tavallaei discloses a system which shall be given time to

become operational if a primary sever fails, which includes a period of time for the backup to become operational. (Lines 35-50 and 65-68 of Column 4 and Lines 1-3 of Column 5). Tavallaei discloses that any number of computer systems can be used to redundant devices or subsystems. (Lines 50-52 of Column 3).

8. Regarding claim 27:

- a. Regarding the limitation of hosting an electronic commerce site, Tavallaei discloses computer environments for "banking transactions, document production, manufacturing... and information systems" which are equivalent to an electronic commerce system. (Lines 23-32 of Column 4).
- b. Regarding the limitation as to method a detecting a change in operation of a computer system, Tavallaei discloses a system that can detect a failure in a computer system and fail over to a redundant system. (Lines 35-41 of Column 4).
- c. Regarding the limitation of automatically configuring a second host computer to host at least a portion of a site, Tavallaei teaches of test a second host to make sure it can be used in case of a failure of a primary host. (Lines 65-67 of Column 4 and Lines 1-3 of Column 5). However, Tavallaei does not teach of a system that can configure a second host upon the failure of a primary. Bell teaches of a system that will configure a secondary server upon the failure of a primary host. (Lines 60-67 of Column 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Bell with the system of Tavallaei because; Tavallaei does not disclose means to have data protection in a business data system. However Tavallaei describes that "the results (of a computer system failure) can be

temporarily catastrophic for the business. " (Lines 30-32 of Column 4). Bell also discloses similar concerns. (Lines 25-29 of Column 1). By incorporating the data reliability and reconfiguration means of Bell and the hosting and detecting means of Tavallaei, a more reliable business host system can be achieved.

9. Regarding claim 29, Tavallaei discloses a relay that is couple to a power source that can switch between the providing the first host computers with power and not providing power (Lines 34-50 of Column 6).
10. Regarding claim 30, Tavallaei discloses a relay that is couple to a power source that can switch between the not providing the second host computers with power and providing power. (Lines 34-50 of Column 6).
11. Regarding claim 44, computer system that includes means of detecting a failure, malfunction or change in performance, Tavallaei discloses a system that detects failure in a computer system. (Lines 50-61 of Column 3)
12. Regarding claim 45:
 - a. Regarding the limitation of hosting an electronic commerce site, Tavallaei discloses computer environments for "banking transactions, document production, manufacturing... and information systems" which are equivalent to an electronic commerce system. (Lines 23-32 of Column 4).
 - b. Regarding the limitation as to method a detecting a change in operation of a computer system, Tavallaei discloses a system that is can detect a failure in a computer system and fail over to a redundant system. (Lines 35-41 of Column 4).

c. Regarding the limitation of automatically configuring a second host computer to host at least a portion of a site, Tavallaei teaches of test a second host to make sure it can be used in case of a failure of a primary host. (Lines 65-67 of Column 4 and Lines 1-3 of Column 5). However, Tavallaei does not teach of a system that can configure a second host upon the failure of a primary. Bell teaches of a system that will configure a secondary server upon the failure of a primary host. (Lines 60-67 of Column 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Bell with the system of Tavallaei because; Tavallaei does not disclose means to have data protection in a business data system. However Tavallaei describes that "the results (of a computer system failure) can be temporarily catastrophic for the business." (Lines 30-32 of Column 4). Bell also discloses similar concerns. (Lines 25-29 of Column 1). By incorporating the data reliability and reconfiguration means of Bell and the hosting and detecting means of Tavallaei, a more reliable business host system can be achieved.

13. Regarding claim 46, Tavallaei discloses means for detecting at least one failure, malfunction, or change in performance of an electronic commerce site. (Lines 35-41 of Column 4).

14. Regarding claim 48, Tavallaei discloses a second storage device coupled to a second computer and controller, wherein the controller has means for replicating a portion of a site to the second computer. (Lines 55-67 of Column 4 and Lines 1-4 of Column 5).

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15. Regarding claim 50, Tavallaei discloses a networked storage system, wherein the first storage device is located in the first computer and the second storage device is located in the second computer. (Lines 5-10 of Column 3).
16. Claims 4, 5, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tavallaei and Bell, as applied to claim1-3 above, and further in view of Vert, et al, U.S. Patent Number 6,360,331. Regarding claim 4, Tavallaei discloses a method of which an electronic commerce host has the ability to detect an error, failure, or malfunction on the first host site and upon detecting this problem to configure a second host site and shut down the first host site. Tavallaei does not teach the method of the first host stores data wherein the act of configuring the second host comprises acts of replication the data of the first host from the storage device to the second host computer. Vert discloses a method of the first host stores data wherein the act of configuring the second host comprises acts of replication the data of the first host from the storage device to the second host computer. (Lines 15-25 and 28-39 of Column 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the art as described by Tavallaei to include the method disclosed by Vert. It would have been within the teaching of Tavallaei to include the method as described by Vert for having a host computer store data and have an automatic configuration to replicate data from the first host computer to the second. Adding this feature to Tavallaei would increase the reliability of the host system in dealing with detecting failure in the host computer. (Lines 21-25 of Column 2 of Vert).

17. Regarding claim 5, Tavallaei does not disclose a second computer using the replicate to bring the computer online. Vert does disclose a second computer using replicate to bring the computer online. (Lines 39-41 of Column 2).
18. Regarding claim 7, Tavallaei does not disclose an act of replicating data from a first storage device in the first system to a second storage device in the second system. Vert does not disclose a first storage device in a first system replicating data to a second storage device in a second system. (Lines 29-39 of Column 2).
19. Regarding claim 10, Tavallaei does not disclose an act of transforming at least a portion of the replicated data of the first host computer for the second host computer when the second host computer is not identical to the first. (Lines 65-68 of Column 1, and Lines 1-13 of Column 2).
20. Claims 12, 18-20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tavallaei and Bell, as applied to claim 1 and 11 above, and further in view of Vert, et al, U.S. Patent Number 6,360,331. Regarding claim 12, Tavallaei discloses a method of which an electronic commerce host has the ability to detect an error, failure, or malfunction on the first host site and upon detecting this problem to configure a second host site and shut down the first host site. Tavallaei does not teach the method of the first host stores data wherein the act of configuring the second host comprises acts of replication the data of the first host from the storage device to the second host computer. Vert discloses a method of the first host stores data wherein the act of configuring the second host comprises acts of replication the data of the first host from the storage device to the second host computer. (Lines 15-25 and 28-39 of Column 2). It would have been

obvious to one of ordinary skill in the art at the time of the invention to modify the art as described by Tavallaei to include the method disclosed by Vert. It would have been within the teaching of Tavallaei to include the method as described by Vert for having a host computer store data and have an automatic configuration to replicate data from the first host computer to the second. Adding this feature to Tavallaei would increase the reliability of the host system in dealing with detecting failure in the host computer. (Lines 21-25 of Column 2 of Vert).

21. Regarding claim 18, Tavallaei does not disclose a second computer using the replicate to bring the computer online. Vert does disclose a second computer using replicate to bring the computer online. (Lines 39-41 of Column 2).
22. Regarding claim 19, Bell discloses a system with means to modify an IP address so that traffic directed toward the primary host server will be transferred to the secondary. (Lines 47-62 of Column 2).
23. Regarding claim 20, Tavallaei does not disclose an act of replicating data from a first storage device in the first system to a second storage device in the second system. Vert does disclose a first storage device in a first system replicating data to a second storage device in a second system. (Lines 29-39 of Column 2).
24. Regarding claim 23, Tavallaei does not disclose an act of transforming at least a portion of the replicated data of the first host computer for the second host computer when the second host computer is not identical to the first. (Lines 65-68 of Column 1, and Lines 1-13 of Column 2).

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25. Claims 28, 31-37, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tavallaei and Bell, as applied to claim 27 above, and further in view of Vert.

Regarding claim 28, Tavallaei teaches a computer system with a first computer host severing an electronic commerce site, a second computer, and a controller for handling failure and malfunctions in the first computer. Tavallaei does not teach that a controller automatically configures the second host computer in response to a detection of failure, malfunctions, or a change in performance. Vert discloses a controller that can automatically configure a second host computer upon receiving a detect signal. (Lines 65-68 of Column 1 and Lines 1-13 of Column 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the controller as taught by Vert into the computer system as disclosed by Tavallaei. It would have been within the teaching of Tavallaei to incorporate the controller as disclosed by Vert because it would allow for a redundant system with a variety of components. (Lines 61-62 of Column 3).

26. Regarding claim 31, Tavallaei does not disclose a computer system that mirrors over a computer systems storage system to a second computer system. Vert discloses the mirroring of a storage system of one computer system to another. (Lines 15-25 of Column 20).

27. Regarding claim 32, Tavallaei does not disclose a computer system that a first storage system is within a first computer system and a second file system is within a second computer system. Vert discloses the separate file system contained within separate computer systems. (Lines 29-41 of Column 2).

28. Regarding claim 33, Bell discloses of a system wherein the second host has a different network address than the primary host. (Lines 39-44 of Column 2).
29. Regarding claim 34, Bell discloses of a system wherein the primary host computer has its network address changed upon detection of a failure. (Lines 46-53 of Column 2).
30. Regarding claim 35, Bell discloses a system wherein the router redirects all traffic from the primary host to the secondary host. (Lines 46-53 of Column 3).
31. Regarding claim 36, Tavallaei does not disclose a computer system that mirrors over a computer systems storage system to a second computer system. Vert discloses the mirroring of a storage system of one computer system to another. (Lines 15-25 of Column 20).
32. Regarding claim 37, Tavallaei does not disclose a computer system that a first storage system is within a first computer system and a second file system is within a second computer system. Vert discloses the separate file system contained within separate computer systems. (Lines 29-41 of Column 2).
33. Regarding claim 41, Tavallaei does not teach a computer system that has a transformation engine that transforms at least a portion of the replicated data for used by the second host computer. Vert discloses a transformation engine (Lines 65-68 of Column 1 and 1-13 of Column 2) as a means of configuring information to work between two computer systems that have different files systems.
34. Regarding claim 42, Tavallaei does not disclose a computer system that a first storage system is within a first computer system and a second file system is within a second

computer system. Vert discloses the separate file system contained within separate computer systems. (Lines 29-41 of Column 2).

Response to Arguments

1. Applicant's arguments filed 03/11/2004 have been fully considered but they are not persuasive.
2. The examiner would like to note that the applicant mentions responding to rejections/arguments from an office action data 8/8/2003. The examiner would like to point out that the final rejection was mailed out after the 8/8/03 office action. By the examiners records, the final rejection was sent around 11/03/2003. The examiner believes that the arguments filed 2/13/2004 do not take into consideration the previous rejections and arguments in the final rejection.
3. Regarding the arguments for claims 6 and 13 being rejected on 35 U.S.C. 112 1st paragraphs, based upon amendment by the applicant, the examiner has removed the 112 rejection previously applied to the claims.
4. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the examiner also contends that the claims do not state specifically what type of system beyond the term electronic commerce system. It is well known in the art that an electronic commerce system must be maintained on a computer, which is processing the electronic commerce system data. The art of Bell teaches of IP addresses that are well known in the art to be used on electronic commerce sites. Tavallaei teaches of servers with host.

6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner would remind the applicant to be mindful of this issue in claims 1, 27, and 45 as discussed below.

7. In regards to the arguments concerning claim 1:

i. The applicant argues that Tavallaei does not disclose an electronic commerce site in column 4 lines 23-32. The examiner contends that the examples given of bank transaction, document production, and information system are all forms of electronic commerce. Tavallaei goes on to say that "the list goes on and on." Also in lines 23 and 24, Tavallaei disclose that the business world is

becoming more dependant on computer systems. Anyone person skill in the computers art would easy agree with this conclusion. Anyone skilled in the art would also state that electronic commerce is a type of computer system used in the business world. Tavallaei system is used to overcome catastrophic downtown in business computer systems. The examiner, using the most reasonable broad interpretation of a business computer system, contends that a business computer system is an electronic commerce system. Bell discloses a computer system that, by applicant's own admission on page 15 of paper number 8, deals with host computer Internet protocol address (IP addresses). It is well, well known in the art that any "site" (which the examiner takes to mean internet website), can or must have an associated IP address with the site address.

ii. The applicant argues that neither Bell or Tavallaei, disclose "automatic configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting." The examiner would like to refer the applicant to the reject at the beginning the action. "Tavallaei discloses a system that is can detect a failure in a computer system and fail over to a redundant system. (Lines 35-41 of Column 4)." And "Bell teaches of a system that will configure a secondary server upon the failure of a primary host. (Lines 60-67 of Column 1)." The examiner contends that Tavallaei discloses the act of detecting the failure of a host computer and Bell discloses a system wherein part of a second computer system is configured (IP address) in response to the failure of a first system. Regarding the argument of

the system not would not perform automatic fail over; Tavallaei discloses that the redundant device can become operational at intervals for amounts of time in order to determine the status of the first device. (Lines 55-60 of Column 1). The examiner contends this constitutes an automatic function. Regarding the argument of the same computer being used, Bell clearly shows in figure 1 that two different servers are used.

8. Regarding claim 27 arguments, please see the comments for claim 1 above.
9. Regarding claim 45 arguments, please see claim 1 comments above and the follow below:
 - iii. The applicant argues that Tavallaei and Bell do not teach where the actions are performed by a controller. The examiner contends, as the applicant discloses on page 20 of paper 8, that Tavallaei is controlled by a computer. However, Tavallaei disclose (Lines 56-64 of Column 4) a microcontroller circuit.

Allowable Subject Matter

10. Claims 6, 8, 9, 13-17, 21, 22, 24, 38-40, 43, 47, 49, and 51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The examiner **would like to offer any assistance possible** to the applicant to overcome the rejection above. If the applicant's representatives wish to discuss any of the above listed information, please **feel free to contact the examiner** at the information listed below.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tim Bonura**.

- o The examiner can normally be reached on **Mon-Fri: 7:30-5:00, every other Friday off**. The examiner can be reached at: **703-305-7762**.

13. If attempts to reach the examiner by telephone are unsuccessful, please contact the examiner's supervisor, **Rob Beausoliel**.

- o The supervisor can be reached on **703-305-9713**.

14. The fax phone numbers for the organization where this application or proceeding is assigned are:

- o **703-872-9306 for all patent related correspondence by FAX.**

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

16. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **receptionist** whose telephone number is: **703-305-3900**.

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17. Responses should be mailed to:

o Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450



Tim Bonura
Examiner
Art Unit 2114

tmb

June 17, 2004

NADEEM IQBAL
PRIMARY EXAMINER